

AMENDMENTS

Please cancel claims:

3, 8, 12, 23-24, 28-29, 32-37, 42, 44-48, 56-58, 62, 65-71, 79-82, 86, 91-92, 97-98

Please make the following amendments to the claims:

1 (Amended). An tunable optical device, comprising:

Sub A1 B1
a holographic element, having a hologram therein which has a predetermined relationship to a plurality of wavelengths;

a wavelength varying element, coupled to said holographic element, and varying said predetermined relationship; and

a first optical system, handling first wavelengths of an optical signal which pass through said holographic element without being changed by said hologram as an output signal; and a second optical system, separate from said first optical system, and handling a second optical signal including said plurality of wavelengths having said predetermined relationship as varied by said wavelength varying element.

A2
19 (Amended). An device as in claim 18, wherein said add port comprises a Y junction.

38 (Amended). A method for multiplexing wavelengths, comprising:

A3
applying an input optical signal having a plurality of wavelengths therein to an area of a hologram;

tuning said hologram to one of said plurality of wavelengths; and

adjusting said hologram to separately optically process said one of said wavelengths differently from others of said wavelengths.

A3 end
39 (Amended). A method as in claim 38, wherein an output signal includes all wavelengths except said one of said wavelengths and producing a dropped signal including only said one of said wavelengths.

A4
49 (Amended). A method as in claim 38, wherein said an optical output signal travels in substantially a same direction as said input optical signal.

A5
61 (Amended). An apparatus as in claim 60, wherein said tuning element changes by moving said hologram.

A6
63 (Amended). An apparatus as in claim 61, wherein said moving said hologram moves said hologram in a way which forms a substantially cone shape.

A7
83 (Amended). A device as in claim 76, wherein said output optical beam includes a first output optical beam and a dropped optical beam, extending in different directions, said first output optical beam having at least one frequency band removed relative to said input optical beam.